

**BILLING CODE: 4910-60-W** 

#### DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 191, 192, and 195

[Docket No. PHMSA-2016-0002]

RIN 2137-AF13

Pipeline Safety: Periodic Updates of Regulatory References to Technical Standards and Miscellaneous Amendments

**AGENCY:** Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** PHMSA is proposing to incorporate by reference more than 20 consensus standards into the Federal pipeline safety regulations. This notice of proposed rulemaking (NPRM) would incorporate by reference a new, updated, or reaffirmed edition of each consensus standard. This NPRM would also make non-substantive corrections to clarify regulatory language in certain provisions. These editorial changes are minor and would not require pipeline operators to undertake new pipeline safety initiatives.

**DATES:** Persons interested in submitting comments on this NPRM must do so by [INSERT DATE 60 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** You may submit comments, identified by Docket No. PHMSA-2016-0002, by any of the following methods:

• *E-Gov Web: http://www.regulations.gov*. This site allows the public to enter comments on any Federal Register notice issued by any agency. Follow the online instructions for submitting comments.

- Mail: Docket Management System: U.S. Department of Transportation, 1200
   New Jersey Avenue SE, West Building Ground Floor, Room W12–140,
   Washington, D.C. 20590–0001.
- Hand Delivery: DOT Docket Management System: West Building Ground Floor,
   Room W12-140, 1200 New Jersey Avenue SE, between 9:00 a.m. and 5:00 p.m.
   ET, Monday through Friday, except Federal holidays.
- *Fax*: 202-493-2251.
- *Instructions:* Identify the Docket No. PHMSA-2016-0002, at the beginning of your comments. If you submit your comments by mail, submit two copies. If you wish to receive confirmation that PHMSA received your comments, include a self-addressed stamped postcard. Internet users may submit comments at <a href="http://www.regulations.gov">http://www.regulations.gov</a>.
- Note: All comments received are posted without edits to
   http://www.regulations.gov, including any personal information provided. Please see the Privacy Act heading below.
- Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from
  the public to better inform its rulemaking process. DOT posts these comments,
  without edit, including any personal information the commenter provides, to
  www.regulations.gov, as described in the system of records notice (DOT/ALL–14
  FDMS), which can be reviewed at www.dot.gov/privacy.
- Confidential Business Information: Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments in response to this notice contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this

notice, it is important that you clearly designate the submitted comments as CBI. Pursuant to 49 Code of Federal Regulations (CFR) § 190.343, you may ask PHMSA to provide confidential treatment to information you give to the agency by taking the following steps: (1) mark each page of the original document submission containing CBI as "Confidential;" (2) send PHMSA a copy of the original document with the CBI deleted along with the original, unaltered document; and (3) explain why the information you are submitting is CBI. Unless you are notified otherwise, PHMSA will treat such marked submissions as confidential under the Freedom of Information Act and they will not be placed in the public docket of this notice. Submissions containing CBI should be sent to Amy E. Allen, 1200 New Jersey Avenue SE, DOT: PHMSA – PHP-30, Washington, D.C. 20590-0001. Any commentary PHMSA receives that is not specifically designated as CBI will be placed in the public docket.

Docket: For access to the docket to read background documents or comments
received, go to http://www.regulations.gov. Follow the online instructions for
accessing the dockets. Alternatively, you may review the documents in person at
the street address listed above.

#### FOR FURTHER INFORMATION CONTACT:

*Technical Information:* Rod Seeley by phone at 713-272-2852 or via email at Rodrick.M.Seeley@dot.gov.

**Regulatory Information:** Amy E. Allen by phone at 202-680-2966 or via email at Amy.Allen@dot.gov.

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#### I. Background

#### A. History of Incorporation by Reference

Voluntary consensus standards are technical standards developed or adopted by domestic and international standards development organizations (SDOs). These organizations use agreed-upon procedures to update and revise their published standards every three to five years to reflect modern technology and best technical practices.

The National Technology Transfer and Advancement Act of 1995 (NTTAA)

(Pub. L. 104-113; March 7, 1996) directs Federal agencies to use voluntary consensus standards and design specifications developed by voluntary consensus standard bodies instead of government-developed voluntary technical standards when appropriate. The Office of Management and Budget (OMB) Circular A-119: Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities sets the policy for Federal use and development of voluntary consensus standards.<sup>1</sup>

Material that is incorporated by reference (IBR) is treated as if it was published in the Federal Register and the CFR. Therefore, like any other rule issued in the Federal Register, a voluntary consensus standard that has been incorporated by reference has the force and effect of law. Congress authorized incorporation by reference to reduce the volume of material published in the Federal Register and the CFR (*see* 5 U.S.C. 552(a) and 1 CFR part 51) and granted authority to the Director of the Federal Register to determine whether a proposed IBR serves the public interest. Unless expressly provided otherwise in a regulation, if a provision of a standard incorporated by reference conflicts with a regulation, the regulation takes precedence.

https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-119-1.pdf.

<sup>&</sup>lt;sup>1</sup> OMB (February 10, 1998), Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities (Circular No. A-119). Retrieved from:

New or updated pipeline standards often incorporate new technologies, materials, management practices, and other innovations that improve the safety and operations of pipelines and pipeline facilities. Because the Federal pipeline safety regulations (PSRs), located in 49 CFR parts 190-199, involve a great deal of technical subject matter, PHMSA has incorporated by reference more than 80 standards and specifications into the regulations. PHMSA regularly reviews newer editions of currently referenced consensus standards and issues regulations to incorporate by reference updated standards where appropriate. This ensures that the PSRs incorporate and facilitate use of the latest safety innovations and materials. In addition to the improvements in the documents themselves, adopting more recent editions of consensus standards prevents conflicts with other standards operators and suppliers may be complying with voluntarily and avoids confusion that can arise when standards required by the regulations are out of date. The lists of publications that PHMSA has incorporated by reference into part 192 (regulating the transportation of natural gas and other gas by pipeline) and 195 (regulating the transportation of hazardous liquids by pipeline) are found at §§ 192.7 and 195.3, respectively.

PHMSA employees participate in 25 national SDOs that address the design, construction, maintenance, inspection, operation, and repair of pipeline facilities. These subject matter experts represent the agency and participate in discussions and technical debates, register opinions, and vote in accordance with the procedures of the standards body at each stage of the standards development process (unless prohibited from doing so by law). PHMSA participates in this process to ensure that the agency's safety priorities are considered and to avoid the need to develop separate, government-unique standards. PHMSA's participation does not imply that the agency agrees with or endorses all decisions reached by such organizations. PHMSA adopts only those portions of consensus standards that adequately protect public safety and the environment.

PHMSA periodically undertakes a rulemaking to IBR updated consensus standards. The standards proposed in this rulemaking have been reviewed by PHMSA personnel and are considered appropriate to incorporate into the CFR. Previous updates to incorporate consensus standards by reference were published on August 6, 2015 (80 FR 46847 (correction)), January 5, 2015 (80 FR 168), August 11, 2010 (75 FR 48593), February 1, 2007 (72 FR 4655 (correction)), June 9, 2006 (71 FR 33402), June 14, 2004 (69 FR 32886), February 17, 1998 (63 FR 7721), and May 24, 1996 (61 FR 26121).

#### B. Availability of Materials to Interested Parties

PHMSA currently incorporates by reference into parts 192, 193, and 195 all or parts of more than 80 standards and specifications developed and published by SDOs. In general, SDOs update and revise their published standards every two to five years to reflect modern technology and best technical practices. ASTM International (ASTM, formerly the American Society for Testing and Materials) often updates some of its more widely used standards every year. Sometimes, multiple editions are published in a given year.

In accordance with the NTTAA, PHMSA has the responsibility for determining which standards should be added, updated, or removed. PHMSA handles revisions to materials incorporated by reference in the PSRs via the rulemaking process, which allows the public and regulated entities the opportunity to provide input. During the rulemaking process, PHMSA must also obtain approval from the Office of the Federal Register to make changes regarding materials incorporated by reference.

Pursuant to Section 24 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, Pub. L. 112-90, 49 U.S.C. 60102(p), as amended, "the Secretary may not issue a regulation pursuant to this chapter that incorporates by reference any documents or portions thereof unless the documents or portions thereof are made available to the public, free of charge." On November 7, 2014, the Office of the Federal

Register issued a final rule that revised 1 CFR 51.5 to require that Federal agencies "discuss, in the preamble of the proposed rule, the ways that the materials it proposes to incorporate by reference are reasonably available to interested parties or how it worked to make those materials reasonably available to interested parties" (79 FR 66267).

To meet the requirements of Section 24, PHMSA negotiated agreements with all but one of the SDOs with standards incorporated by reference in the PSRs to make viewable copies of those standards available to the public at no cost. The organizations that agreed to the requirements of Section 24 are: the American Petroleum Institute (API), the American Gas Association (AGA), ASTM, the Gas Technology Institute (GTI), the Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS), NACE International (NACE), and the National Fire Protection Association (NFPA). As of the date of publication, PHMSA was not able to reach an agreement with the American Society of Mechanical Engineers (ASME). Each organization's mailing address and website is listed in 49 CFR parts 192, 193 and 195.

In addition, PHMSA will provide temporary access to any standard which is incorporated by reference or proposed for incorporation. To gain temporary access to standards, including those from ASME, please email <a href="mailto:phmsastandards@dot.gov">phmsastandards@dot.gov</a> with your request. You must include your phone number and physical address, and an email address where we should send a response. PHMSA will respond within five business days and provide access to the standard.

#### II. Summary of Standards Incorporated by Reference Proposed to be Updated

This list includes the title of each standard affected by this NPRM, the edition PHMSA proposes to incorporate, a summary of the standard, the previously incorporated version (if applicable), and the sections in the CFR where the standards are referenced. The omission of a new edition of a standard in this NPRM does not imply that PHMSA

has reviewed and rejected that document. In this NPRM, PHMSA proposes to incorporate the following updated editions of technical standards currently incorporated by reference in parts 192 and 195:

A. American Petroleum Institute (API)

### 1. API Recommended Practice 651, Cathodic Protection of Aboveground Petroleum Storage Tanks

PHMSA proposes to incorporate by reference API Recommended Practice (RP) 651, "Cathodic Protection of Aboveground Petroleum Storage Tanks," 4<sup>th</sup> edition, September 2014 into §§ 195.565 and 195.573(d). Cathodic protection is a method of protecting metallic pipelines from corrosion. This RP contains: (1) procedures and practices for effective corrosion control on aboveground storage tank bottoms using cathodic protection; (2) provisions for the application of cathodic protection to existing and new aboveground storage tanks; and (3) information and guidance for cathodic protection specific to aboveground metallic storage tanks in hydrocarbon service.

The amendments in the 4<sup>th</sup> edition of API RP 651 are primarily minor technical improvements and editorial revisions. These improvements include more specific details throughout and more conservative consideration of cathodic protection based on pad material, product temperature, and tank size. These corrosion-control-requirement updates improve safety and the clarity and technical accuracy of the document.

[Replaces IBR: ANSI/API Recommended Practice 651, "Cathodic Protection of Aboveground Petroleum Storage Tanks," 3<sup>rd</sup> edition, January 2007, (ANSI/API RP 651).]

2. API Recommended Practice 2026, "Safe Access/Egress Involving Floating Roofs of Storage Tanks in Petroleum Service"

PHMSA is proposing to incorporate API RP 2026, "Safe Access/Egress Involving Floating *Roofs* of Storage Tanks in Petroleum Service," 3<sup>rd</sup> edition, June 2017 into § 195.405(b). The 3<sup>rd</sup> edition of API RP 2026 (formerly API Publication 2026) addresses

the hazards associated with access/egress onto external and internal floating roofs of inservice petroleum storage tanks. In a floating roof tank, the roof floats on top of product in the tank and rises and lowers with the level of product in the storage tank. Floating roofs minimize the creation of hazardous vapors above the product. A floating roof can be designed for use on a tank with no fixed roof (an external floating roof) or inside a tank with a fixed roof (internal floating roof).

Work tasks requiring access to floating roofs poses unique safety hazards to maintenance personnel. These include confined space hazards, hazardous atmospheric conditions such as flammable or toxic vapors, and various physical hazards depending on the design and condition of the tank. The document identifies a number of these potential hazards and prescribes practices, procedures, and tests, which are required to mitigate these hazards and perform work safely. In the regulations, operators are required to use API RP 2026 to consider the hazards associated with performing maintenance on inservice hazardous liquid storage tanks and identify applicable hazardous conditions, safety practices, and procedures in their procedure manual.

The 3<sup>rd</sup> edition of API RP 2026 includes several minor, primarily editorial updates. These include minor revisions to the definitions, eliminating references to NFPA 70 and NFPA 325M, changes to terminology such as replacing the phrase "lower flammable limits" to the phrase "lower explosive limits," and additional clarifications to conditions in Section 7.1.4. The clarified conditions include atmospheric, working, tank service, operating, product loading, and physical conditions. In general, these clarifications mean that individuals must make sure hazards are addressed and potential sources of hazards or vapor ignition have been properly secured before they go onto a tank floating roof. These minor changes improve the usability of the document. [Replaces IBR: API Publication 2026, "Safe Access/Egress Involving Floating Roofs of Storage Tanks in Petroleum Tanks," 2<sup>nd</sup> edition, April 1998 (Reaffirmed June 2006).]

#### 3. API Specification 5L, Specification for Line Pipe

PHMSA is proposing to incorporate by reference API Specification (Spec) 5L, "Specification for Line Pipe," 46<sup>th</sup> edition, April 2018, including Errata 1 (May 2018) into §§ 192.55(e); 192.112(a), (b), (d), (e); 192.113; Item I, Appendix B of part 192; and 195.106(b) and (e). API Spec 5L is the primary manufacturing specification for seamless and welded steel pipe for use in both gas and hazardous liquid pipeline transportation systems. The specification does not cover cast pipe and non-steel pipe. The specification includes requirements for pipe material, manufacturing, quality control and testing, inspection, and pipe marking.

The 46<sup>th</sup> edition of API Spec 5L includes slightly strengthening the pipe end straightness tolerance requirement from 4 mm maximum of deflection within 1 meter of each end to 3.2 mm maximum of deflection within 1.5 meters of each end, and clarifies how to define and measure end-squareness. Additionally, it includes some editorial revisions consistent with changes to API style guidelines.

The specification also contains two new annexes: (1) Annex M – Specification for Welded Jointers and (2) Annex N – Pipe Ordered for Applications Requiring

Longitudinal Plastic Strain Capacity. Annex M adds requirements for pipe manufacturers making welded jointers, which are short pieces of pipe welded together to form one joint.

Welded jointers are similar to double jointing except that typically double jointing is not done by the manufacturer. Before this annex, 5L had no requirements for testing the jointed welds nor how they should be marked. Annex N adds baseline requirements for pipe manufactured for strain-based design (SBD) projects. SBD is used for pipelines that may see high levels of strain due to pipe movement from geotechnical forces; few onshore pipelines in the continental United States see these strains and instead use conventional stress-based design. Part 192 does not permit SBD, except under special

permit; however, the new annexes do enhance pipeline safety under the circumstances to which they are applicable.

[Replaces IBR: API Specification 5L, "Specification for Line Pipe," 45<sup>th</sup> edition, July 2013, (ANSI/API Spec 5L).]<sup>2</sup>

#### 4. API Specification 6D, Specification for Pipeline and Piping Valves

PHMSA is proposing to incorporate API Specification (Spec) 6D, "Specification for Pipeline and Piping Valves," 24th edition, August 2014, including Errata 1 (October 2014), Errata 2 (December 2014), Errata 3 (February 2015), Errata 4 (June 2015), Errata 5 (July 2015), Errata 6 (September 2015), Errata 7 (June 2016), Errata 8 (August 2016), Errata 9 (March 2017), Addendum 1 (March 2015), and Addendum 2 (June 2016) into \$\\$ 192.145 (a) and 195.116 (d). API Spec 6D defines the design, manufacturing, assembly, testing, and documentation requirements for valves used in pipeline systems. PHMSA requires all valves on gas pipeline systems, other than those made of cast-iron or plastic, to meet the requirements of API Spec 6D or a national or international standard that provides an equivalent performance level. Liquid pipeline valves must be shell-tested and seat-tested in accordance with API Spec 6D.

The valve shell test or body test is conducted based on the valve manufacturer's approved test procedure and Section 9.3 of API Spec 6D. In the valve shell test, the valve ends are closed and the valve is put in a partially open position. The valve body is hydrostatically tested with a test pressure of at least 1.5 times the pressure rating of the valve body. The result of the test is satisfactory if no visible leak is observed from the

<sup>&</sup>lt;sup>2</sup> On May 1, 2019, PHMSA issued a notice to natural gas and hazardous liquid pipeline operators alerting them that PHMSA would exercise enforcement discretion if an operator did not comply with API Specification 5L, 45<sup>th</sup> edition, provided that the operator could "demonstrate compliance with the more stringent provisions of API Spec 5L, 46<sup>th</sup> edition, April 2018, including Errata 1 (May 2018)." [https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/standards-rulemaking/pipeline/71236/stay-enforcement-api-specification-5l.pdf]. PHMSA indicated in the notice of enforcement discretion that it was intended to remain in effect until PHMSA took final action on incorporating the 46<sup>th</sup> edition in a rulemaking. A copy of the notice of enforcement discretion is included in the docket.

valve body, packing gland, or elsewhere. This test ensures that the valve body will not fail and leak product into the surrounding environment at the pressure rating.

The valve seat leak test is performed after successful completion of valve shell test. During this test, the valve is completely closed. The inlet of the valve is hydrostatically tested with a test pressure of at least 1.1 times the pressure rating of the valve. The valve passes the seat test if the measured leakage does not exceed the maximum values in section 9.4.3 of the standard. Block valves must be seat tested for each intended fluid flow direction. This test ensures that a block valve will adequately stop the flow of product through the valve when it is closed.

The 24th edition of API Spec 6D includes several clarifications, safety improvements, and editorial revisions. Safety improvements include clarified bore tolerance specifications for full-opening valves,<sup>3</sup> and new procedures for installers when no minimum bore tolerances are listed in the specification. Additionally, the 24th edition prohibits designing flanged valves with intermediate pressure ratings. The flanges used to connect such valves to other components have standardized pressure specifications. Prohibiting flanged valves with an intermediate pressure rating avoids potentially dangerous situations, like transferring such a valve to an application with pressure that is within the design limits of the standard flanges, but exceeds the pressure rating of the valve to which the flanges are attached. Other improvements include adding a requirement that valve body and cover components be chosen based on the pressure-temperature rating of the material used, and requirements for valve cavity pressure relief devices.

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<sup>&</sup>lt;sup>3</sup> A full opening valve is designed with an opening that is unobstructed when the valve is in the open position. The opening must be not smaller than the inside diameter of the end connections. The bore refers to the minimum inside diameter of valve, including the size of the opening.

The 24<sup>th</sup> edition also includes new guidance and clarification regarding calibration, marking, and documentation requirements. The calibration provisions were updated to specify that calibration intervals should not exceed one year. The marking provisions were updated to provide more detailed information regarding the location, letter size, and the use of name plate markings for the smaller valves. Also, the provisions on the information that is provided with each valve were updated to include additional information that may be useful for installers, operators, and inspectors. [Replaces IBR: ANSI/API Specification 6D, "Specification for Pipeline Valves," 23<sup>rd</sup> edition, October 1, 2008, including Errata 1 (June 2008), Errata 2 (November 2008), Errata 3 (February 2009), Errata 4 (April 2010), Errata 5 (November 2010), Errata 6 (August 2011) Addendum 1 (October 2009), Addendum 2 (August 2011), and Addendum 3 (October 2012), (API Spec 6D).]

### 5. API Standard 620, Design and Construction of Large, Welded, Low-Pressure Storage Tanks

PHMSA proposes to incorporate by reference API Standard (Std) 620 "Design and Construction of Large, Welded, Low-Pressure Storage Tanks," 12<sup>th</sup> edition, October 2013, including Addendum 1 (November 2014) into §§ 195.132 (b)(2); 195.205(b)(2); 195.264(b)(1); 195.264(e)(3); 195.307(b); 195.565; and 195.579(d). API Std 620 specifies design, construction, and testing requirements for large, field assembled, welded steel tanks used to store petroleum, petroleum products, or other liquids used in the petrochemical industry. Tanks designed, constructed, and tested in accordance with API Std 620 are rated to operate with a vapor pressure up to 15 psig and a metal temperature below 250°F.

The primary benefit of incorporating the 12<sup>th</sup> edition involves incorporating new materials and designs. These revisions include revised requirements for seismic loading design standards and more stringent design and testing standards for refrigerated tank

systems. Specifically, the outer shell of double wall tanks must now meet most material and design requirements applicable to the inner shell of refrigerated tanks. Hazardous liquid breakout tanks typically do not require refrigeration and requirements for liquefied natural gas plants in part 193, including standards for refrigerated tanks, are being considered in a separate rule. Finally, the 12<sup>th</sup> edition adds standards for steel mixed materials storage tanks and duplex stainless-steel storage tanks, which were not previously included in the standard.

[Replaces IBR: API Standard 620, "Design and Construction of Large, Welded, Low-pressure Storage Tanks," 11<sup>th</sup> edition, February 2008, including addendum 1 (March 2009), addendum 2 (August 2010), and addendum 3 (March 2012), (API Std 620).]

#### 6. API Standard 650, Welded Tanks for Oil Storage

PHMSA is proposing to incorporate API Std 650, "Welded Tanks for Oil Storage," 13<sup>th</sup> edition, March 1, 2020, into §§ 195.132(b); 195.205(b); 195.264(b), (e); 195.307(c) and (d); 195.565; and 195.579(d). This standard establishes minimum requirements for material, design, fabrication, erection, and inspection for vertical, cylindrical, aboveground, closed- and open-top, welded storage tanks in various sizes and capacities for internal pressures approximating atmospheric pressure. This standard applies only to tanks whose entire bottom is uniformly supported and to tanks in non-refrigerated service that have a maximum design temperature of 93°C (200°F) or less. In part 195, breakout tanks associated with the transportation of hazardous liquids that are included in the scope of this standard must be designed, constructed, tested, and repaired in accordance with API Std 650.

Many of the changes since the 11<sup>th</sup> edition of API Std 650 result in enhanced safety. The standard strengthens anchoring requirements by increasing the criteria required to allow a tank to be unanchored and requiring that more welds be examined. In addition, the revised standard contains provisions for considering snow loading on

floating roofs to account for increases in internal pressures. Other changes are editorial; for example, throughout the standard, the term "inspection" is changed to "examination" when referring to NDE. These revisions improve the clarity and technical accuracy of the document.

However, there are sections of the revised standard that may provide a smaller factor of safety than the 11th edition. For example, in the revised standard, the factor used in equations to calculate how high the product in the tank may slosh around during a seismic event in Equation E.7.2-1 changes from 0.5 to 0.42, which is less conservative. Seismic design is not always required in the CFR, but Annex E (Seismic Design of Storage Tanks) must be applied if seismic design is requested by the operator. This revision lowers the minimum freeboard (the space in the tank between maximum operating level of the product and the maximum possible product level) specifications for tanks designated by the operator as Seismic Use Group (SUG)<sup>4</sup> III or tanks designated as SUG II in areas with higher potential vertical acceleration (see Table E.7). Most breakout tanks would be classified as SUG I, where minimum freeboard specifications are recommended but not required. As described in EC.7.2 in the standard, damage to the roof due to sloshing is very unlikely to cause a structural failure of the tank itself; the primary consequences of sloshing damage are the potential for an interruption of operations, repair costs, or, if the roof fails, a small release into secondary containment. This change is also offset by other improvements in the revised standard, including more conservative vertical acceleration parameter in E.6.1.3 (Vertical Seismic Effects). The

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<sup>&</sup>lt;sup>4</sup> Seismic Use Groups (SUGs) are defined in API Std 650 at EC.3 and are used to classify tanks by the potential consequences of failure during a seismic event. Tanks designated as SUG III or SUG II serve public safety or public welfare functions, or pose a hazard to the public and lack secondary containment. SUG I is the default classification and includes most tanks with secondary containment and tanks without containment located in a terminal or industrial area away from public access.

revised standard sets a parameter value at the maximum of what was previously a range of values.

The majority of the changes in the 13<sup>th</sup> edition of the standard are editorial and do not substantially change or effect safety. Additional changes include adding new requirements for anchor nuts and bolts; further refining the process for design wind speeds, pressures, and loads; specifying which weld pass (inside/outside) may be applied for various examination methods; further broadening hydrotest requirements; and adding an allowance for the minimum number of inspection hatches to be based on the size of a given tank.

[Replaces IBR: API Standard 650, "Welded Tanks for Oil Storage," 11th edition, June 2007 (effective February 1, 2012), includes addendum 1 (November 2008), addendum 2 (November 2009), addendum 3 (August 2011), and errata (October 2011), (API Std 650).]

#### 7. API Standard 1104, Welding of Pipelines and Related Facilities

PHMSA is proposing to incorporate by reference API Std 1104, "Welding of Pipelines and Related Facilities" 21st edition, September 2013, including Errata 1 (April 2014), Errata 2 (June 2014), Errata 3 (July 2014), Errata 4 (November 2015), Errata 5 (September 2018), Addendum 1 (July 2014), and Addendum 2 (May 2016) into \$\\$ 192.225(a); 192.227(a); 192.229(c); 192.241(c); Item II of Appendix B to part 192; 195.214(a); 195.222(a) and (b); and 195.228(b). API Std 1104 is the primary standard for welding steel piping and for testing welds on steel pipelines. It covers the requirements for welding and nondestructive testing of pipeline welds. In the PSRs, this standard is used for qualifying welders, welding procedures, and welding operators, and interpreting the results of non-destructive tests.

The most significant revisions in the 21st edition of API Std 1104 include safety improvements to sections that are incorporated by reference into the regulations. In

Section 5, which addresses welding procedures for processes using filler metals, the updates include: requirements that electrical characteristics be specified for each specific type and size of electrode, rod, or wire; specifications regarding when and how forced cooling of a recently completed weld can be performed; a new requirement to consider the mechanical compatibility of filler metals; a new requirement to specify the electrode manufacturer and trade name for certain types of shielded metal arc welding electrodes; and modified criteria that allow acceptance of tensile tests if the specimen breaks outside the weld and heat-affected-zone at a value not less than 95 percent of the specified minimum tensile strength of the pipe material.

The 21<sup>st</sup> edition revises Section 6 to allow ultrasonic testing of welds used for welder qualification. Although Section 10 is not used in the PSRs, it is greatly expanded in the 21<sup>st</sup> edition to provide more information on repairing welds. The revisions to Section 12 include documentation enhancements like those in Section 5 and a requirement to perform a nick-break test<sup>5</sup> for procedures that include manual or semi-automatic passes. The addition of nick-break tests helps ensure that mechanized welds made with manually deposited passes will meet the workmanship requirements in API 1104.

In addition, the 21<sup>st</sup> edition adds guidance to both Appendix A and Appendix B.

The 21<sup>st</sup> edition of Appendix A modifies essential variables to better quantify the variability of welding electrodes and pipe materials, clarifies acceptance criteria for tensile tests, and adds a requirement to verify production welding is performed within the parameters of the qualified welding procedure via a quality control program. The 21<sup>st</sup> edition of Appendix B adds guidance on making in-service welds and expands the section to cover weld deposition pipe repair.

<sup>5</sup> A nick-break test is a destructive test for evaluating the quality of a weld. In the test, a weld specimen is prepared and then fractured. The exposed surface is then visually examined for weld imperfections.

The 21st edition also allows a welder qualified in a fixed position to be qualified for the roll position. Welder qualification in the fixed position requires demonstration of welding skills in multiple positions around a stationary pipe. During roll welding, the welder only welds in one position while the pipe rotates and the welder must only demonstrate welding skills in one position. Since a welder qualified in a fixed procedure has demonstrated the skills necessary to weld in multiple positions, this change has no effect on safety and eliminates duplicative qualification requirements.

[Replaces IBR: API "Standard 1104, "Welding of Pipelines and Related Facilities," 20th edition, October 2005, including errata/addendum (July 2007) and errata 2 (2008), (API Std 1104).]

## 8. ANSI/API Standard 2000, Venting Atmospheric and Low-pressure Storage Tanks

PHMSA is proposing to incorporate by reference API Std 2000, "Venting Atmospheric and Low-pressure Storage Tanks," 7th edition, March 2014, into § 195.264(e)(2) and (e)(3). This standard contains vapor-venting requirements for aboveground liquid petroleum products storage tanks and aboveground and/or underground refrigerated storage tanks, all of which are designed for operation at pressures from full vacuum through 103.4 kPa (or 15 psig). Normal vapor venting refers to the inflow and outflow of vapor related to pressure changes inside the storage tanks. Emergency vapor venting relates to the inflow or outflow of vapor that may occur due to unforeseen circumstances. Vapor-venting requirements deal with the operation of vapor vents in response to temperature and pressure changes both inside and outside of a tank. Pressure normally accumulates inside most production or breakout storage tanks that contain various types of hazardous liquid. The new edition of this standard provides more information on equipment that stabilizes pressure within the tank by venting or depressurizing once the pressure within the tank reaches a certain level. The vapor-

venting requirements in this standard elaborate on pipeline owners' obligations, including providing vapor-venting equipment guidelines.

The 7<sup>th</sup> edition of API Std 2000 contains several minor revisions since the currently incorporated 6<sup>th</sup> edition. These include greater in-breathing and out-breathing calculation requirements, modified reduction factor for double-wall tanks, and eliminating the need to calculate evaporation rates. The 7<sup>th</sup> edition also includes more stringent requirements to ensure that vapor releases from relief devices and vents do not create hazards for nearby workers, equipment, or structures. These requirements increase safety by not allowing the accumulation of potentially flammable vapors at grade level or in enclosed spaces, and the new requirements for vapor releases from relief devices and vents provide greater protection for workers and properties during venting operations.

[Replaces IBR: ANSI/API Standard 2000, "Venting Atmospheric and Low-pressure Storage Tanks," 6<sup>th</sup> edition, November 2009, (API Std 2000).]

## 9. API Standard 2350, Overfill Prevention for Storage Tanks in Petroleum Facilities

PHMSA proposes to incorporate by reference API Standard (Std) 2350, "Overfill Prevention for Storage Tanks in Petroleum Facilities," 5th edition, September 1, 2020, into § 195.428(c). This standard is intended for storage tanks associated with facilities that receive flammable and combustible petroleum liquids, such as refineries, marketing terminals, bulk plants, and pipeline terminals. It addresses minimum overfill and damage-prevention practices for aboveground storage tanks in petroleum facilities, including refineries, marketing terminals, bulk plants, and pipeline terminals that receive flammable and combustible liquids.

The revised edition is a major rewrite of the document that includes the development of policies and procedures to incorporate management of an overfill protection process (OPP) and risk assessment. The most significant changes include new

requirements for: (1) a written management system for overfill prevention processes; (2) overfill risk-assessment processes; (3) expanded requirements for the testing of OPP systems and related procedures; and (4) the use of safety-instrumented systems (instruments that collect data used to keep the overfill prevention systems operating safely) on new automatic overfill prevention systems. The 5<sup>th</sup> edition revises the scope of the standard to include dedicated pipeline relief tanks on breakout tanks to the extent practicable. These additional requirements will result in safer operation of applicable tanks.

[Replaces IBR: API Recommended Practice 2350, "Overfill Protection for Storage Tanks in Petroleum Facilities," 3<sup>rd</sup> edition, January 2005, (API RP 2350).]

B. The American Society of Mechanical Engineers (ASME)

ASME BPVC (Section VIII, Divisions 1 and 2) were previously approved for incorporation by reference and appears in the regulatory text unchanged.

#### 1. ASME B31.8, Gas Transmission and Distribution Piping Systems

PHMSA is proposing to incorporate by reference ASME B31.8-2018, "Gas Transmission and Distribution Piping Systems," November 20, 2018, (ASME B31.8), into §§ 192.112(b); 192.619(a); 195.5(a); and 195.406(a). This standard covers safety requirements associated with the design, fabrication, installation, inspection, testing, and operation and maintenance of pipeline facilities used for the transportation of natural gas and liquefied petroleum gases when they are vaporized and used as gaseous fuels.

More specifically, ASME B31.8 addresses the following requirements associated with the design, fabrication, installation, inspection, testing, and operation and maintenance of pipeline facilities that are referenced through the regulations. The revisions related to these requirements are also summarized below:

• Fracture control for steel pipe using alternative maximum allowable operating pressure in gas pipelines (§ 192.112(b)).

- The 2016 version made editorial changes such as numbering the paragraphs associated with fracture control and arrest in 841.1. Some relatively minor technical changes were made, such as adding a clarification note regarding application of equations associated with ductile facture.
- The 2018 version revises the equations for Charpy energy values (aka Charpy V-notch absorbed energy or Charpy V-notch toughness (CVN)) to use diameter instead of radius as a variable. This version also includes a note that addresses situations in which the CVN exceeds a certain value and full-sized test pieces are used. The note expands already-existing requirements related to API 5L testing.
- Test pressure for determining maximum allowable operating pressure in steel or plastic gas pipelines (§ 192.619(a)), testing the pipeline for conversion to service for hazardous liquid pipelines (§ 195.5(a)), and test pressure for determining maximum operating pressure for liquid pipelines (§ 195.406(a)), which all reference ASME B31.8 Appendix N-5.
  - The revised version includes some editorial changes in Appendix N-5
    associated with renumbering of other referenced sections. There are no
    technical changes in Appendix N-5.

[Replaces IBR: ASME/ANSI B31.8-2007, "Gas Transmission and Distribution Piping Systems," November 30, 2007, (ASME/ANSI B31.8).]

### 2. ASME B31.8S, Supplement to B31.8 on Managing System Integrity of Gas Pipelines

PHMSA is proposing to incorporate by reference ASME B31.8S-2016, "Managing System Integrity of Gas Pipelines, Supplement to ASME B31.8," October 31, 2016, (ASME/ANSI B31.8S) into §§ 192.903 note to the definition of *Potential impact* 

radius; 192.907 introductory text, (b); 192.911 introductory text, (i), (k), (l), (m); 192.913(a), (b), (c); 192.917 (a), (b), (c), (d), (e); 192.921(a); 192.923(b); 192.925(b); 192.927(b), (c); 192.929(b); 192.933(c), (d); 192.935 (a), (b); 192.937(c); 192.939(a); and 192.945(a). ASME B31.8S describes the foundations for an effective integrity management (IM) program for gas transmission pipelines. Along with subpart O of part 192, ASME B31.8S provides the essential features of an integrity management program. Section 3.2 of B31.8S addresses the potential impact factor for gases other than standard quality natural gas that may be transported through a gas transmission pipeline. Other sections are as follows: Section 4 – Gathering, Reviewing and Integrating Data; Section 5 - Risk Assessment and Reassessment Intervals; Section 6.2 - Selection of In-line Inspection Tools (ILI); Section 6.4 – Direct Assessment Requirements for External Corrosion and Internal Corrosion; Section 7 – Remediation Schedule and Immediate Repair Requirements; Section 9 – Performance Plan and Program Effectiveness; Section 10 – Communications Plan; Section 11 – Management of Change Process; Section 12 – Quality Assurance Process; Appendix A – Data Requirements of Each Threat; Appendix A3 – Direct Assessment requirements for the Stress Corrosion Cracking (SCC) Threat; Appendix 4.3 and 4.4 – Criteria and Risk Assessment and Integrity Assessment for the Manufacturing Threat; and Appendix A7 – Criteria and Risk Assessment and Integrity Assessment, Response and Mitigation and Performance Measures for the Third Party Damage Threat.

The standard applies to onshore pipeline systems constructed with ferrous materials (such as iron and steel) that transport gas. It is frequently referenced throughout subpart O and is designed to provide the operator with the information necessary to develop and implement an effective integrity management program utilizing proven industry practices and processes.

Revisions to ASME B31.8S relative to the 2004 edition that is currently incorporated by reference include added information on Stress Corrosion Cracking Direct Assessments (SCCDA), an assessment method for identifying stress corrosion cracking. The 2016 edition also provides additional guidance on managing cracking threats. Other changes since the 2004 edition include adding performance metrics for block valve failures in Table 9.4, requiring examinations for immediate and 1-year repair conditions discovered by direct assessment, and updates and additions for references to secondary standards. In addition to the above, each revision since 2004 includes other minor technical changes, editorial revisions, and added or revised guidance. Together, PHMSA expects these additions, updates, and clarifications to improve the effectiveness of the Federal gas transmission integrity management requirements.

PHMSA is not proposing the incorporation by reference of the 2018 edition of ASME B31.8S, "Managing System Integrity of Gas Pipelines, Supplement to ASME B31.8," November 28, 2018, (ASME/ANSI B31.8S), into §§ 192.7(c)(6). The 2018 edition includes several minor editorial changes that PHMSA found to be acceptable; however, the changes in section 10 remove nearly all communications plan requirements included in § 192.911(m). PHMSA has not, therefore, proposed incorporation of the 2018 edition. The 2016 version, in contrast, retains the communication plan requirement in section 10 of ASME B31.8S-2016. PHMSA requests comments regarding whether it should incorporate by reference ASME B31.8S-2018.

[Replaces IBR: ASME/ANSI B31.8S-2004, "Supplement to B31.8 on Managing System Integrity of Gas Pipelines," 2004 edition, issued January 14, 2005, (ASME/ANSI B31.8S-2004).]

#### 3. ASME B36.10M, Welded and Seamless Wrought Steel Pipe

PHMSA is proposing to incorporate by reference ASME B36.10M-2018, "Welded and Seamless Wrought Steel Pipe," 2018 edition, October 12, 2018, into

§ 192.279. This standard is proposed to replace the current reference in § 192.279 to Table C1 of ASME/ANSI B16.5. The 2003 and subsequent editions of ASME B16.5 remove Table C1<sup>6</sup>; that information is now in ASME B36.10M-2018. Therefore, PHMSA is proposing to revise § 192.279 to replace the phrase "listed in Table C1 of ASME/ANSI B16.5" to "listed in ASME B36.10M."

C. ASTM International (Formerly American Society for Testing and Materials)

ASTM A672/A672M-09 was previously approved for incorporation by reference and appears in the regulatory text unchanged.

### ASTM A53/A53M, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

PHMSA is proposing to incorporate by reference ASTM A53/A53M-20, "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless," July 1, 2020, into § 192.113; Item II, Appendix B to part 192; and § 195.106(e). ASTM A53/A53M specifies the design for seamless and welded black and hot-dipped galvanized steel pipe in nominal pipe size (NPS) 1/8 to NPS 26. The standard also specifies requirements for tests of material properties, hydrostatic tests, and non-destructive tests. The revised standards published since the 2010 edition currently incorporated by reference only incorporate minor editorial revisions or clarifications that are expected to provide an equal or increased level of safety. The 2012 edition clarifies the chemical requirements table to allow additional manganese content if carbon content is reduced (both carbon and manganese increase the hardness and strength of steel but may lead to welding issues with excessive content), the 2018 edition removes language prescribing the method for measuring wall thickness and allowing other engineering-

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<sup>&</sup>lt;sup>6</sup> ASME (1996), *Pipe Flanges and Flanged Fittings* (ASME B16.5-1996). Retrieved from: https://www.academia.edu/38001928/ANSI ASME B16.5 1996 Pipe Flanges and Flanged Fittings.

acceptable methods, and the 2020 edition states that galvanized pipe must be completely and evenly covered with zinc. These revisions add some flexibility to the specifications. [Replaces IBR: ASTM A53/A53M-10, "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless," 2010 edition, approved October 1, 2010, (ASTM A53/A53M).]

# 2. ASTM A106/106M, Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service

PHMSA is proposing to incorporate by reference ASTM A106/A106M-19A, "Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service," November 1, 2019, into §§ 192.113; Item 1, Appendix B to part 192; and 195.106(e). This specification covers seamless carbon steel pipe for high-temperature service in NPS 1/8 to NPS 48. The updates added since the 2010 edition currently incorporated by reference include clarifying the supplementary requirements in the ordering information, as well as the definition of single or double random lengths of pipe with single random joints allowed from 17 to 24 foot lengths and double random joints being between 36 and 44 feet. The updates also allow heat treatment of hot-finished pipe, require that any tests be performed after heat treatment to ensure the tests are on the finished product, add a note to the chemical requirements table to allow additional maximum manganese content if maximum carbon content is reduced (both carbon and manganese increase the hardness and strength of steel but may lead to welding issues with excessive content), and include other minor editorial changes. These revisions provide additional flexibility and clarity to the specification.

[Replaces IBR: ASTM A106/A106M-10, "Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service," 2010 edition, October 1, 2010 (ASTM A106/A106M).]

3. ASTM A333/A333M, Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service and Other Applications with Required Notch Toughness

PHMSA is proposing to incorporate by reference ASTM A333/A333M-18, "Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service and Other Applications with Required Notch Toughness," November 1, 2018, into §§ 192.113; Item 1, Appendix B to part 192; and 195.106(e). This specification covers nominal (average) wall seamless and welded carbon and alloy steel pipe intended for use at low temperatures and covers chemical, tensile strength, mechanical testing, and other requirements. The standards published since the 2011 edition that is currently incorporated by reference only add minor editorial revisions. These include expanding the scope of the standard to other applications with required notch toughness (notch toughness indicates the ability of the steel to absorb an impact without failing when a defect such as a notch, groove, or gouge is present); changing the name of the element Columbium to the more common, internationally used "Niobium;" changing "minimum impact test temperature" to "impact test temperature," which will help standardize test temperature; clarifying procedures for impact testing, which will help standardize testing; and incorporating changes to the notes for the chemical requirements table. Adopting these updates improves the clarity of the requirements, provides a greater or equivalent level of safety, and ensures compatibility with other standards. [Replaces IBR: ASTM A333/A333M-11, "Standard Specification for Seamless and

[Replaces IBR: ASTM A333/A333M-11, "Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service," 2011 edition, April 1, 2011, (ASTM A333/A333M).]

4. ASTM A381, Standard Specification for Metal-Arc-Welded Carbon or High-Strength Low-Alloy Steel Pipe for Use With High-Pressure Transmission Systems

PHMSA is proposing to incorporate by reference ASTM A381/A381M-18, "Standard Specification for Metal-Arc-Welded Carbon or High-Strength Low-Alloy Steel Pipe for Use With High-Pressure Transmission Systems," November 1, 2018, into §§ 192.113; Item I, Appendix B to part 192; and 195.106(e). This specification covers straight-seam, double-submerged arc-welded steel pipe (commonly referred to as DSAW pipe as opposed to spiral-welded or electric-resistance-welded pipe) that is intended for the fabrication of fittings and accessories for compressor or pump-station piping and is suitable for high-pressure service at outside diameters of 16 inches or greater. The revised standard incorporates a number of changes, including: clarifying quench and temper requirements (when requested by a purchaser); updating tensile and guided-bend testing requirements to include the use of ASTM A370 instead of the outdated requirements in the previous edition of the standard; adding two new grades of material, Y70 and Y80, which have similar requirements to API 5L X70 and API 5L X80 but are higher-strength grades that have become more common in the pipeline industry; and numerous editorial changes that update the document to match the current ASTM style guidelines. The added quench and temper requirements in this standard are part of a clause that only takes effect if an operator agrees to enact it. This clause addresses reheating pipe after it is manufactured to ensure that the atoms form in an appropriate formation, and allows for this reheated pipe to be water-quenched or tempered—in addition to the previously approved air-cooling method—if the purchaser requests these cooling methods. In addition, the standard contains references to other ASTM standards that have changed since 1996, and the revised version incorporates these changes. The referenced standards address various test methods and general material and marking requirements for steel pipe in ASTM specifications. These changes update and modernize the document, and the improved testing requirements should provide a greater level of safety.

[Replaces IBR: ASTM A381-96, "Standard Specification for Metal-Arc Welded Steel Pipe for Use with High-Pressure Transmission Systems," 1996 edition (Reaffirmed 2005), October 1, 2005, (ASTM A381).]

5. ASTM A671/671M, Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures

PHMSA is proposing to incorporate by reference ASTM A671/A671M-20, "Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures," March 1, 2020, into §§ 192.113; Item 1, Appendix B to part 192; and 195.106(e). ASTM A671/671M specifies the design, fabrication, and testing requirements for electric-fusion-welded (as opposed to arc-welded) steel pipe with added filler metal. Specifically, the specification applies to pipe fabricated from pressure vessel quality steel plate suitable for use at high pressures at atmospheric and lower temperatures. The updated standard includes minor changes from the 2010 edition which is currently incorporated by reference—that update and correct the tables for plate specifications and heat-treatment parameters to account for the introduction, revision, or obsolescence of pipe grades and related heat-treatment practices. These revisions allow operators and manufacturers to take advantage of advances in materials and manufacturing technology, as well as to eliminate pipe grades and heat treatments that are no longer used. In addition, the revised standard clarifies tensile-test requirements to help ensure consistent testing methodology. This change represents a minor advancement of the standard and provides an equivalent or greater level of safety. [Replaces IBR: ASTM A671/A671M-10, "Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures," 2010 edition, April 1, 2010, (ASTM A671/671M).]

6. ASTM A691/691M Standard Specification for Carbon and Alloy Steel Pipe,
Electric-Fusion-Welded for High-Pressure Service at High Temperatures

PHMSA is proposing to incorporate by reference ASTM A691/A691M-19, "Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures," November 1, 2019, into §§ 192.113; Item 1, Appendix B to part 192; and 195.106(e). This standard specifies the design, composition, fabrication, and testing of carbon and alloy steel pipe. The changes in the revised edition include a requirement that ASTM A387/A387M Grade 91 material be designated and marked by Type 1 or Type 2 when required by that standard, as well as minor revisions to the ordering information specifications to differentiate between plate grades and pipe grades. In addition, the revised edition changes the name of the element with atomic number 41 from Columbium to Niobium. These minor revisions make the specification more consistent with other manufacturing standards and improve the clarity of the document. [Replaces IBR: ASTM A691/A691M-09, "Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures," 2009 edition, October 1, 2009, (ASTM A691/A691M).]

D. Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry

#### 1. ANSI/MSS SP-44, Steel Pipeline Flanges

PHMSA is proposing to incorporate by reference ANSI/MSS SP-44-2019, "Steel Pipeline Flanges," April 2020 into § 192.147(a). This American National Standard Institute (ANSI)/Manufacturers Standardization Society (MSS) Standard Practice (SP) covers pressure-temperature ratings, materials, dimensions, tolerances, marking, and testing of steel pipeline flanges. The revised edition specifies material chemistry and strength requirements; clarifies definitions; defines flange dimensions for weld-end, flange bolting, and flange-face tolerances for flange raised-face height and bolt-hole diameter marking; clarifies allowable heat-treatment methods; and makes impact testing at -50 degrees F mandatory for grades over F42 for steel pipeline flanges. The revised edition adds a new section on manufacturing and inspection that requires a documented

manufacturing procedure and prescribes minimum testing requirements for the forging method, heat treatment, machining and dimensions, mechanical tests, non-destructive examination, and material traceability. Other changes since the 2010 edition, which is currently incorporated by reference, include more specific material chemistry and carbonequivalent standards for weldability, quality control to maintain strength and dimensional requirements, heat-treatment requirements, and the addition of a hardness-testing requirement. The revised edition also revises requirements for markings and tolerances and includes updates regarding ANSI approval, strength, and inspection-quality assurance. These new or enhanced requirements improve manufacturing quality control and enhance safety through more consistent flange tensile strength, chemistry, and end tolerances for weldability and fit-up with other flanges. This SP is ANSI-approved as a revised American National Standard and was published in April 2020. PHMSA expects the quality improvement requirements in this edition will help ensure more consistent flange properties and dimensions, which should have operational and safety benefits to operators during construction, pressure testing, and operations.

[Replaces IBR: MSS SP-44-2010, "Standard Practice, Steel Pipeline Flanges," 2010 edition, March 1, 2010, including Errata (May 20, 2011), (MSS SP-44).]

#### 2. MSS SP-75, High-Test, Wrought, Butt-Welding Fittings

PHMSA proposes to incorporate by reference MSS SP-75-2019, "High-Test, Wrought, Butt-Welding Fittings," December 2019 into § 195.118(a). This MSS SP specifies requirements for factory-made, seamless, and electric-welded carbon and low-alloy steel butt-welding fittings. The SP states that it is applicable to fittings used in high-pressure gas and oil transmission and distribution systems, including pipelines, compressor stations, metering and regulating stations, and mains.

The revised edition includes revisions to product chemistry, strength, inspection quality assurance, chemical composition and carbon-equivalent standards, heat-treatment

practices, welding procedures for the fittings, and recordkeeping requirements. The product chemistry changes in the standard help ensure that carbon-equivalent computations for modern types of steel are based upon the usage of a lower amount of carbon in the fitting. The standard states that a fitting cannot exceed 0.45 percent of the carbon equivalent, and that operators must identify any fitting in which the carbon equivalent exceeds 0.42 percent. This change will help operators identify whether preheating is necessary prior to welding a fitting to pipe.

The updated standard also edits the heat-treatment standards to require that the heat-treatment furnace must maintain a temperature that is between -25 and 25 degrees Fahrenheit of the required furnace temperature. The edited heat-treatment standards require annual verification, specify the appropriate test standard that operators should use, and compel the manufacturer to maintain test records. Further, the revised standard outlines the heat-treatment processes that operators can use to obtain stress-relieving, normalizing, or quenching and tempering specified material properties. The standard also requires manufacturers to maintain procedures and heat-treatment records.

The revised standard requires operators to review the heat-treatment records for each test lot of heat-treated fittings for consistency with both the fitting specifications and the prior fitting heat-treatment results, as applicable. The standard notes that each fitting must be manufactured in accordance with a manufacturing procedure specification that specifies the fittings' starting material; forming method; welding-procedure specification; heat-treatment procedure with thermal cycles; machining requirements; inspection, dimension, and test requirements; fitting end prep; coating; and markings. The standard states that each manufacturer must have a quality-control program that ensures their fittings conform to all applicable requirements in the standard. Further, the standard requires manufacturers to perform a minimum inspection test plan on each fitting that

outlines the type and number of tests that must be performed and the specifications that the test must meet to ensure the quality of the fitting.

The MSS revised the updated edition of this standard with input from PHMSA and other stakeholders. The revised edition includes rewritten proof-test requirements and new requirements for segmentable elbows, and adopts new requirements for manufacturers to have manufacturing procedure specification and inspection test plans. More stringent material requirements and improved manufacturing controls are intended to address problems such as failures due to cracking or insufficient material strength and welding issues caused by variations in the chemistry or dimensions of flanges. PHMSA expects these improvements will enhance safety. PHMSA expects the quality-improvement requirements in this edition will help ensure more consistent fitting properties and dimensions, which is expected to have operational and safety benefits during construction, pressure testing, and operations.

[Replaces IBR: MSS SP-75-2008, "Specification for High Test Wrought Butt Welding Fittings," 2008 edition, (MSS SP-75).]

E. NACE International (Formerly National Association of Corrosion Engineers)

### 1. NACE SP0204, Standard Practice (SP): Stress Corrosion Cracking (SSC) Direct Assessment Methodology

PHMSA is proposing to incorporate by reference NACE SP0204-2015, "Stress Corrosion Cracking (SCC) Direct Assessment Methodology," March 14, 2015, into § 195.588(c). This SP provides a process and a series of required steps for operators to use to assess the extent of stress-corrosion cracking on a section of buried pipeline. The methodology is designed as a screening tool to determine whether SCC is a substantial risk on a pipeline system.

The 2015 edition contains a few minor improvements from the 2008 edition. For example, the 2015 edition provides additional guidance references regarding the

susceptibility requirements for near-neutral SCC and adds new references for recommended practices for near-neutral SCC. Near-neutral-pH SCC is a transgranular form of SCC that occurs on underground pipelines and is associated with a near-neutralpH electrolyte. This form of cracking typically experiences limited branching and is associated with some crack wall corrosion, as well as occasional pipe surface corrosion. It is also referred to as low-pH or non-classical SCC. The SP also defines parameters quantifying SCC severity based on the size and depth of SCC found in the field and notes that fatigue and corrosion fatigue must be considered on liquid pipelines. Some of these revisions have already been integrated in recent industry projects. PHMSA expects these changes will improve the reliability of operators' SCC direct assessment plans and thereby increase efficiency, help remove variables and guesswork, and allow operators to better target potential SCC sites. The additional definitions and guidance also promote more consistent SCC evaluations, as consideration of additional variables will allow operators to further refine or classify suspected SCC and more consistently integrate these classifications into assessment or remediation plans.

[Replaces IBR: NACE SP0204-2008, "Standard Practice, Stress Corrosion Cracking (SSC) Direct Assessment Methodology," 2008 edition, September 18, 2008, (NACE SP0204).]

F. National Fire Protection Association (NFPA)

NFPA-30 (2012) was previously approved for incorporation by reference and appears in the regulatory text unchanged.

#### 1. NFPA 58, Liquefied Petroleum Gas Code

PHMSA is proposing to incorporate by reference NFPA 58, "Liquefied Petroleum Gas Code," 2020 edition, October 25, 2019, into §§ 192.7 and 192.11(a), (b), and (c). NFPA 58 specifies requirements for the "storage, handling, transportation, and use of liquefied petroleum gas." The PSRs require any plant that supplies liquefied petroleum

to a pipeline system and any pipeline system that transports only petroleum gas or petroleum gas mixtures to meet the requirements of NFPA 58 in addition to the requirements of part 192. PHMSA did not incorporate prior editions of this standard due to content and requirements that could potentially have conflicted with elements of 49 CFR part 192. The revised edition, however, alleviates or removes the potential conflicts.

The revised edition of NFPA 58 includes more detailed, comprehensive sections covering the design and installation of liquefied petroleum systems. Significant additions include new or revised standards for regulators regarding modified piping, vapor systems, leak detection, containers, and structural supports. Furthermore, the revised edition references more recent editions of almost all the standards referenced in the 2004 edition that is currently incorporated by reference. The new references included in the revised edition are ANSI B1.20.1, ANSI/CSA 6.26(LC1), ANSI Z21.18/CSA 6.3, ANSI Z21.80/CSA 6.22, API 607, ASTM E119, ASTM F1055, ASTM F2945, CAN/ULC S642, CGA-6.3, CGA-S-1.1, CGA-S-1.3, CSA 6.32(LC4a), CSA B149.5, ISO/NP 19825, NFPA 13, NFPA 55, NFPA 99, UL 21, UL 125, UL 263, UL 514B, UL 569, UL 1337, UL 1660, UL 1769, and UL 2227. The revised edition removes references to ASTM B539, NFPA 50B, and NFPA 251. In addition to the safety improvements, the revised edition reduces the potential for conflict with the code when new systems are designed, built, and maintained in accordance with the more recent version of the standards referenced in NFPA 58.

The 2020 edition of this standard incorporates a number of changes that maintain or enhance the level of safety established in the previous editions of the standard. These changes include allowing operators to use additional types of steel pipe, including schedule 10 steel (solely for aboveground vapor service) or austenitic stainless steel pipes. The revised standard allows for the use of schedule 10 steel in limited

applications, which aids the pipeline industry by allowing them to use schedule 10 pipe that they might already plan to purchase for another application for aboveground vapor service as well. This change benefits industry while maintaining an equivalent level of safety. The revised standard also allows for the use of austenitic stainless steel, which is a type of stainless steel that has a specific austenitic crystal structure (a face-centered cubic structure) that results in higher heat and corrosion resistance. This steel is commonly used in extreme temperature applications, and can be found as a component in duplex stainless steels. Pipe manufacturers often provide mixed steel types in piping batches, and the exclusion of this steel in previous versions of this standard was based on the potential for variation. However, the characteristics of the steel have since been reviewed and determined to be within tolerance for general LP applications. Further, the standard revises both fire extinguisher requirements and the scope of chapter 15. The chapter 15 revisions enhance safety by deleting superfluous installation requirements, incorporating operations and maintenance requirements, and removing duplicative language applicable to U.S. DOT-regulated systems. The fire extinguisher revisions confirm that operators must be able to quickly shut off access to a fuel source if they intend to use fire extinguishers in the event of a liquefied petroleum gas fire. This change streamlines NFPA 58 and other relevant industry standards.

Finally, the 2020 edition of the standard includes requirements regarding face-seal inspections, fire-resistance-rated materials, and noncombustible materials. Regarding the face-seal inspections, the updated standard requires that operators must inspect face seals for CGA 791 and 793 connections before filling a cylinder. Additionally, the standard notes that operators must refrain from filling cylinders and replace the relevant valve if they find that the face seal is defective. The standard also notes that operators must ensure that noncombustible and specific fire-resistance-rated materials fulfill specific requirements.

[Replaces IBR: NFPA-58, "Liquefied Petroleum Gas Code (LP-Gas Code)," 2004 edition, April 1, 2004, (NFPA-58).]

#### 2. NFPA 59, Utility LP-Gas Plant Code

PHMSA is proposing to incorporate by reference NFPA 59, "Utility LP-Gas Plant Code," 2018 edition, August 17, 2017, into § 192.11 (a), (b), and (c). In the PSRs, the requirements for liquefied petroleum gas facilities are mostly defined in NFPA 59 and NFPA 58, as applicable. NFPA 59 specifies the design, construction, location, installation, operation, and maintenance of utility gas plants. Compared to NFPA 58, NFPA 59 generally covers larger facilities.

Four editions of NFPA 59 have been issued since 2004 (2008, 2012, 2015, and 2018). The revisions made from the 2008 edition to the 2015 edition include provisions on corrosion protection; personnel training relative to the operation or maintenance of propane-air mixing equipment; and provisions for sizing pressure-relief devices for propane installations over 300 psig. These provisions are included in the 2018 edition. Further, the 2018 edition of NFPA 59 includes more detailed, comprehensive sections covering the design and maintenance of liquefied petroleum plants. Significant changes include adding and clarifying definitions, removing out-of-scope topics conflicting with part 192, such as vehicle fuel systems, and expanding the scope of protected components previously not covered, such as the protection of in-plant piping. Adopting the 2018 edition reduces the potential for conflict with the code when new systems are designed, built, or maintained to the specifications of the more recent version of such referenced standards in NFPA 59.

[Replaces IBR: NFPA-59, "Utility LP-Gas Plant Code," 2004 edition (NFPA-59).]

#### 3. NFPA 70, National Electrical Code (NEC)

PHMSA proposes to incorporate by reference NFPA 70, "National Electrical Code (NEC)," 2017 edition, August 23, 2016, into §§ 192.163(e) and 192.189(c). NFPA

70, also known as the National Electrical Code (NEC), covers the installation and removal of electrical equipment, conductors, and conduits in structures and outdoor areas. The NEC is a foundational standard for electrical safety in residential, commercial, and industrial implementations. It is referenced in the PSRs to provide requirements for the safe installation of electrical equipment at compressor stations in natural gas pipeline facilities.

The 2017 edition includes several revisions from the 2011 edition that is currently incorporated by reference. Changes include new provisions for energy-storage systems, labeling requirements for equipment consistent with NFPA 70E, and clearance requirements for certain electrical equipment. The 2017 edition also expands marking and maintenance requirements for emergency electrical systems and requires a minimum temperature rating for fire alarm cables. The improvements in the 2017 edition of NFPA 70 enhance the safety of electrical systems and equipment in compressor stations, mitigating potential ignition risks.

[Replaces IBR: NFPA-70, "National Electrical Code," 2011 edition, September 24, 2010, (NFPA-70).]

#### III. Miscellaneous Amendments

PHMSA is also proposing editorial amendments and corrections to the PSRs. The most significant of these revisions responds to a petition for rulemaking from the American Gas Association (AGA). In addition to petitioning PHMSA to incorporate the most recent edition of NFPA 59 by reference, AGA suggested edits to § 192.11 to clarify the scope of NFPA 58 and NFPA 59. The regulations currently require operators of liquefied petroleum plants and pipelines to meet the requirements of both NFPA 58 and NFPA 59. The proposed change clarifies that operators must only meet the requirements for the NFPA standard that is applicable to the type of facility they operate, based on the

scope and applicability statements in those standards. Generally, NFPA 58 applies to liquefied petroleum pipeline systems and NFPA 59 to utility-scale liquefied petroleum gas plants.

Another revision corrects the minimum wall thickness tables for plastic pipe made of polyethylene (PE), polyamide (PA) 11, and polyamide 12 in § 192.121 to include specifications for pipe with a copper tubing size (CTS) of 1-1/4 inches and correct the minimum wall thickness for 1 inch CTS pipe. The minimum wall thickness and, more specifically, the dimension ratio (DR; the ratio of outside diameter to wall thickness) being proposed for these sizes is consistent with values already specified for adjacent sizes. Plastic pipe, especially PE, is very common on gas distribution systems. On November 20, 2018, PHMSA published a final rule (83 FR 58694) that allowed plastic pipe to operate with a design factor (a derating factor) of 0.4 rather than 0.32 provided it met various requirements, including having a minimum wall thickness as defined in the tables in § 192.121. As described in the final rule, the Regulatory Impact Analysis, and AGA's petition for rulemaking, the revised design factor allows the use of approximately 17 percent less material or 11 percent higher capacity for a given outside specification.

The NPRM included listings for CTS sizes of ½ and ¾ inch for PE pipe. In response to comments, PHMSA included CTS sizes for PA11 and PA12 pipe and IPS sizes below 1 inch for all materials. However, stakeholders have subsequently requested PHMSA consider including 1-1/4 inch CTS as well. This amendment would allow the use of 1-1/4 inch CTS pipe with a 0.4 design factor provided the pipe wall is at least 0.121 inches thick. A wall thickness of 0.121 corresponds to a dimension ratio of approximately 11. This is the same SDR as what is currently permitted for 1-1/4 inch Iron Pipe Size (IPS) and 1 inch CTS and 1 inch IPS. This change would reduce the cost to produce this size of plastic pipe by approximately 10 percent. The revised design factor is already permitted for similar, adjacent sizes such as 1-1/4 inch IPS pipe. It was

not PHMSA's intent to exclude specifications such as 1-1/4 inch CTS. The costs and benefits of this proposal were accounted for in the RIA for the 2018 final rule.

Other proposed editorial revisions that PHMSA proposes are:

- Update references to PHMSA's website at https://portal.phmsa.dot.gov/ in §§ 191.22 (b) and (c), and 195.64;
- Copy the definition for "master meter system" used in part 191 to part 192. The term "master meter system" is referenced in both part 191 and part 192, however it is only defined in part 191 at § 191.3. The definition would be added to part 192 at § 192.3;
- Correct a reference to flange requirements in § 192.147(a) to clarify that flanges
   must meet ASME B16.5 or ANSI/MSS SP-44, not both;
- Correct the placement of the word "in" in § 192.153(d);
- Remove reference to an inactive phone number for the NPMS program in §§ 192.727(g) and 195.59(a);
- Remove references to § 195.242(c) and (d) in § 195.1(c) because this section no longer exists in the regulations;
- Correct § 195.3(c)(3) to reflect that ASME B31.4 is no longer referenced in § 195.452(h); and
- Add the house number to the address for DOT headquarters in § 192.805.

#### IV. Regulatory Analyses and Notices

# A. Summary/Legal Authority for this Rulemaking

This NPRM is published under the authority of the Federal Pipeline Safety Laws (49 U.S.C. 60101 *et seq.*). Section 60102 authorizes the Secretary of Transportation to issue regulations governing the design, installation, inspection, emergency plans and procedures, testing, construction, extension, operation, replacement, and maintenance of

pipeline facilities. Further, section 60102(l) states that the Secretary shall, to the extent appropriate and practicable, update incorporated industry standards that have been adopted as a part of the PSRs. This NPRM proposes to incorporate by reference 25 updated editions of standards currently incorporated by reference and one new standard. In addition, this NPRM proposes to make several other minor clarifying and editorial changes to the PSRs.

Executive Order 12866 and DOT Policies and Procedures for Rulemaking

Executive Order 12866 ("Regulatory Planning and Review") (58 FR 51735; Oct. 4, 1993) requires agencies to regulate in the "most cost-effective manner," to make a "reasoned determination that the benefits of the intended regulation justify its costs," and to develop regulations that "impose the least burden on society." This NPRM is not considered a significant regulatory action under Executive Order 12866. Accordingly, this NPRM was not reviewed by OMB. DOT also considers this NPRM to be non-significant under its Policies and Procedures for Rulemakings (49 CFR part 5).

In this NPRM, PHMSA is proposing to incorporate by reference updated editions of 25 standards currently referenced in parts 192 and 195 and one new standard. According to the annual reports pipeline that operators submit to PHMSA, there are more than 3,244 entities operating hazardous liquid, natural gas transmission, gathering, distribution systems, and liquefied natural gas facilities as of September 12, 2018. The amendments in this NPRM should enhance safety and reduce the compliance burden on the regulated industry. However, the anticipated cost savings and benefits have not been quantified. PHMSA expects the cost savings and benefits of incorporating these standards to be negligible. The industry standards developed and adopted by consensus are largely accepted by the pipeline industry.

In addition to updating consensus standards, PHMSA is proposing miscellaneous non-substantive amendments and clarifications of regulatory language in certain

provisions. Since these editorial changes are relatively minor, the proposed changes would not require pipeline operators to undertake new pipeline safety initiatives and are expected to have negligible cost implications. To the extent that the changes have an impact, they are expected to increase the clarity of the PSRs and help improve the safety of the Nation's pipeline systems.

In accordance with the NTTAA and OMB Circular A-119, PHMSA reviews new editions and revisions to relevant standards and publishes a NPRM approximately every two years to incorporate by reference new or updated consensus standards. This practice is consistent with the intent of the NTTAA and OMB directives to avoid the need for developing government-written standards that could potentially result in regulatory conflicts with updated industry standards and an increased compliance burden on industry.

#### Executive Order 13771

This proposed rule is not expected to be an Executive Order 13771 regulatory action because this proposed rule is not significant under Executive Order 12866. Details on the estimated cost savings of this proposed rule can be found in the Executive Order 12866 section above.

#### Executive Order 13132

PHMSA analyzed this NPRM in accordance with the principles and criteria contained in Executive Order 13132, "Federalism," (64 FR 43255; Aug. 10, 1999).

Executive Order 13132 requires agencies to assure meaningful and timely input by State and local officials in the development of regulatory policies that may have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." While the proposed rule may operate to preempt some State requirements, it does not impose any regulation that has substantial direct effects on the States, the

relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. The pipeline safety laws, specifically 49 U.S.C. 60104(c), prohibit State safety regulation of interstate pipeline facilities. However, under the pipeline safety laws, States can augment pipeline safety requirements for intrastate pipeline facilities, but may not approve safety requirements less stringent than those required by Federal law. A State may also regulate an intrastate pipeline facility PHMSA does not regulate. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

#### Executive Order 13175

PHMSA has analyzed this NPRM according to the principles and criteria in Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," (65 FR 67249; Jan. 29, 2014). Because this NPRM does not significantly or uniquely affect the communities of the Indian tribal governments or impose substantial direct compliance costs, the funding and consultation requirements of Executive Order 13175 do not apply. We invite Indian tribal governments to provide comments on the costs and effects that this or a future rulemaking could potentially have on tribal communities.

Regulatory Flexibility Act, Executive Order 13272 and DOT Procedures and Policies

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), requires an agency to review regulations to assess their impact on small entities, unless the agency determines the rule is not expected to have a significant impact on a substantial number of small entities. PHMSA estimates the costs of incorporating these standards to be negligible as industry standards developed and adopted by consensus are largely accepted and followed by the pipeline industry, which assures that the industry is not forced to comply with several different standards to accomplish the same safety goal. Most pipeline

operators already purchase and apply industry standards as part of common business practice.

Based on the information available about the anticipated impact of this NPRM, PHMSA does not anticipate that this NPRM will have a significant economic impact on a substantial number of small entities, under Section 605 of the Regulatory Flexibility Act (5 U.S.C. 605), because the costs of the NPRM are expected to be negligible.

This NPRM was also developed in accordance with Executive Order 13272, "Proper Consideration of Small Entities in Agency Rulemaking," (68 FR 7990; Feb. 19, 2003), and DOT's procedures and policies to promote compliance with the Regulatory Flexibility Act to ensure that potential impacts on small entities of a regulatory action are properly considered.

#### Paperwork Reduction Act

PHMSA has analyzed this NPRM in accordance with the Paperwork Reduction Act of 1995 (PRA) (Pub. L. 104-13; May 22, 1995). The PRA requires Federal agencies to minimize paperwork burden imposed on the American public by ensuring maximum utility and quality of Federal information, ensuring the use of information technology to improve the Federal Government's performance and accountability for managing information collection activities. This NPRM does not impose any new information collection requirements or modify any existing information collections requirements. *Regulation Identifier Number* 

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN number contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

Unfunded Mandates Reform Act of 1995

This NPRM will not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995 (UMRA) (Pub. L. 104-4; March 22, 1995). The statutory thresholds established in UMRA were \$50 million for intergovernmental mandates and \$100 million for private-sector mandates in 1996. According to the Congressional Budget Office, the thresholds for 2019, which are adjusted annually for inflation, are \$82 million and \$164 million, respectively, for intergovernmental and private-sector mandates. The NPRM is not expected to exceed these thresholds in any one year to either State, local or tribal governments, in the aggregate, or to the private sector, and would be the least burdensome alternative that achieves the objective of this NPRM. Therefore, PHMSA is not required to prepare a written statement.

#### Privacy Act Statement

Anyone may search the electronic form of comments received in response to any of our dockets by the name of the individual submitting the comment (or signing the comment if submitted for an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the *Federal Register* published on April 11, 2000 (65 FR 19477), or you may visit <a href="www.transportation.gov/privacy">www.transportation.gov/privacy</a>.

#### Environmental Assessment

The National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 – 4375, requires Federal agencies to analyze proposed actions to determine whether the action will have a significant impact on the human environment. The Council on Environmental Quality regulations require Federal agencies to conduct an environmental review considering: (1) the need for the proposed action; (2) alternatives to the proposed action; (3) probable environmental impacts of the proposed action and alternatives; and (4) the agencies and persons consulted during the consideration process (40 CFR § 1508.9(b)).

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<sup>&</sup>lt;sup>7</sup> https://www.cbo.gov/publication/51335.

In this NPRM, PHMSA proposes to incorporate 25 updated editions of currently referenced standards and one new standard.

<u>Description of Action</u>: The NTTAA directs Federal agencies to use voluntary consensus standards and design specifications developed by voluntary consensus standard bodies instead of government-developed voluntary technical standards, when applicable. There are currently more than 80 standards incorporated by reference in parts 192, 193, and 195 of the PSRs.

PHMSA engineers and subject matter experts participate on 25 standards development committees to keep current on committee actions. PHMSA will only propose to adopt standards into the Federal regulations that meet the agency's directive(s) to ensure the best interests of public and environmental safety are served.

<u>Purpose and Need</u>: Many of the industry standards currently incorporated by reference in the PSRs have been revised and updated to incorporate and promote new technologies and methodologies. This NPRM will allow operators to use new technologies by incorporating new editions of the standards into the PSRs.

PHMSA's technical and subject matter experts continually review the actions of pipeline standards developing committees and study industry safety practices to ensure that their endorsement of any new editions or revised standards incorporated into the PSRs will improve public safety, as well as provide protection for the environment. If PHMSA does not amend the PSRs to keep up with industry practices, it could potentially have an adverse effect on the safe transportation of energy resources.

These proposed amendments would make the regulatory provisions more consistent with current technology and would therefore promote the safe transportation of hazardous liquids, natural and other gases, and liquefied natural gas by pipeline.

<u>Alternatives Considered</u>: In developing this NPRM, PHMSA considered two alternatives:

Alternative (1): Take no action and continue to incorporate only the existing standards currently referenced in the PSRs. Because PHMSA's goal is to facilitate pipeline safety and incorporate appropriate and up to date consensus standards, PHMSA rejected the no action alternative. This alternative would potentially result in forgoing the safety and environmental improvements in the updated standards.

Alternative (2): Adopt the above-described amendments and incorporate updated editions of voluntary consensus standards to allow pipeline operators to use current technologies. This is the proposed alternative. PHMSA's goal is to incorporate by reference all or parts of updated editions of voluntary consensus standards into the PSRs to allow pipeline operators to use current technology, new materials, and other industry and management practices. Another goal is to update and clarify certain provisions in the regulations.

Environmental Consequences: The Nation's pipelines are located throughout the United States, both onshore and offshore, and traverse a variety of environments—from highly populated urban sites to remote, unpopulated rural areas. The Federal pipeline regulatory system is a risk management system that is prevention-oriented and focused on identifying safety hazards and reducing the probability and quantity of a natural gas or hazardous liquid release. Pipeline operators are required to develop and implement IM programs to enhance safety by identifying and reducing pipeline integrity risks.

Pipelines subject to this NPRM transport hazardous liquids and natural gas, and therefore a spill or leak of the product could affect the physical environment as well as the health and safety of the public. The release of hazardous liquids or natural gas can cause the loss of cultural and historical resources (e.g., properties listed on the National Register of Historic Places), biological and ecological resources (e.g., coastal zones, wetlands, plant and animal species and their habitats, forests, grasslands, offshore marine ecosystems), special ecological resources (e.g., threatened and endangered plant and

animal species and their habitats, national and State parklands, biological reserves, wild and scenic rivers), and the contamination of air, water resources (e.g., oceans, streams, lakes), and soil that exist directly adjacent to and within the vicinity of pipelines. Incidents involving pipelines can result in fires and explosions, causing damage to the local environment. Depending on the size of a spill or gas leak and the nature of the failure zone, the potential impacts could vary from property damage or environmental damage to injuries or, on rare occasions, fatalities.

Compliance with the PSRs substantially reduces the possibility of an accidental release of product. Updating new industry standards or those already incorporated into the PSRs can provide operators with the advantages and added safety that can accompany the application of newer technologies. These standards are based on the accumulated knowledge and experience of owners, operators, manufactures, risk management experts and others involved in the pipeline industry as well as government agencies who write the regulations to ensure the products are moved safely throughout the country. PHMSA staff actively participates in the standards development process to ensure each standard incorporated will enhance safety and environmental protection. Newer editions are not automatically incorporated but reviewed in detail. PHMSA reviewed each of the standards described in this proposed rule and have determined that most of the updates involve minor changes such as editorial changes, inclusion of a best practices, or similar changes.

The majority of updates proposed for incorporation into this NPRM increase safety standards with the direct intent to decrease risk. In a small number of instances, standards organizations relax standards to reduce industry burden where justified by low risk, overlapping protections, or technological innovation. One provision that allows for relaxation are the less conservative design sloshing wave height calculations in the revised edition of API Std 650, allowing welders qualified in a fixed position to be

qualified also to weld in the roll position in the 21<sup>st</sup> edition of API Std 1104, and eliminating the need to calculate evaporation rates in the 7<sup>th</sup> edition of API Std 2000. PHMSA has determined that the safety improvements in API Std 650, API Std 1104, and API Std 2000 offset those changes.

Conclusion – Degree of Environmental Impact: PHMSA incorporates consensus standards that will allow the pipeline industry to use improved technologies, new materials, performance-based approaches, manufacturing processes, and other practices to enhance public health, safety, and welfare. PHMSA's goal is to ensure hazardous liquids, natural and other gases, and liquefied natural gas transported by pipeline will arrive safely to their destinations.

PHMSA invites comments on the potential impact on human health or the environment that would result if this rule was issued.

#### Executive Order 13211

Executive Order 13211 ("Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use") (66 FR 28355; May 22, 2001) requires Federal agencies to prepare a Statement of Energy Effects for any "significant energy action." Under the Executive Order, a "significant energy action" is defined as any action by an agency (normally published in the Federal Register) that promulgates, or is expected to lead to the promulgation of, a final rule or regulation (including a notice of inquiry, ANPRM, and NPRM) that (1)(i) is a significant regulatory action under Executive Order 12866 or any successor order and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action.

Transporting gas and petroleum affects the Nation's available energy supply.

However, this NPRM would not be a significant energy action under Executive Order

13211. It also would not be a significant regulatory action under Executive Order 12866

and would not likely have a significant adverse effect on the supply, distribution, or use

of energy. This NPRM has not been designated as a significant energy action.

National Technology Transfer and Advancement Act

As discussed above, the National Technology Transfer and Advancement Act of

1995 (15 U.S.C. 272 note) directs Federal agencies to use voluntary consensus standards

in their regulatory activities unless doing so would be inconsistent with applicable law or

otherwise impractical. Voluntary consensus standards are technical standards (e.g.,

specification of materials, test methods, or performance requirements) that are developed

or adopted by voluntary consensus standards bodies. This proposed rule updates 26

voluntary consensus standards, which are discussed in detail in the "Summary of

Standards Incorporated by Reference" section.

V. List of Subjects

49 CFR part 191

Pipeline safety, Reporting and recordkeeping requirements

49 CFR part 192

Incorporation by reference, Pipeline safety, Natural gas.

49 CFR part 195

Incorporation by reference, Pipeline safety, Anhydrous ammonia, Carbon dioxide,

Petroleum.

In consideration of the foregoing, PHMSA is proposing to amend 49 CFR parts 191, 192

and 195 as follows:

PART 191—TRANSPORTATION OF NATURAL AND OTHER GAS BY

PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

- 1. The authority citation for part 191 continues to read as follows:

  Authority: 30 U.S.C. 185(w)(3), 49 U.S.C. 5121, 60101 *et seq.*, and 49 CFR 1.97.
- 2. In § 191.22, revise paragraph (b) and the introductory text of paragraph (c) to read as follows:

#### § 191.22 National Registry of Operators.

\* \* \* \* \*

- (b) *OPID validation*. An operator who has already been assigned one or more OPID by January 1, 2011, must validate the information associated with each OPID through the National Registry of Pipeline, Underground Natural Gas Storage Facility, and LNG Operators at *https://portal.phmsa.dot.gov*, and correct that information as necessary, no later than June 30, 2012.
- (c) *Changes*. Each operator of a gas pipeline, gas pipeline facility, underground natural gas storage facility, LNG plant, or LNG facility must notify PHMSA electronically through the National Registry of Pipeline, Underground Natural Gas Storage Facility, and LNG Operators at *https://portal.phmsa.dot.gov* of certain events.

\* \* \* \* \*

# PART 192—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

- 3. The authority citation for part 192 continues to read as follows:

  Authority: 30 U.S.C. 185(w)(3), 49 U.S.C. 5103, 60101 *et seq.*, and 49 CFR 1.97.
- 4. In part 192, wherever they occur, remove the words "ASME/ANSI B31.8S" and "ANSI/ASME B31.8S" and add in their place the words "ASME B31.8S".

5. In § 192.3 add the definition for "Master Meter System" in appropriate alphabetical order to read as follows:

#### § 192.3 Definitions

\* \* \* \* \*

Master Meter System means a pipeline system for distributing gas within, but not limited to, a definable area, such as a mobile home park, housing project, or apartment complex, where the operator purchases metered gas from an outside source for resale through a gas distribution pipeline system. The gas distribution pipeline system supplies the ultimate consumer who either purchases the gas directly through a meter or by other means, such as by rents.

\* \* \* \* \*

- 6. Amend § 192.7 as follows:
  - a. Revise the paragraph (b) introductory text and paragraphs (b)(7) through (9);
- b. Republish the paragraph (c) introductory text, revise paragraphs (c)(2), (5), and (6), redesignate paragraphs (c)(7) through (10) as (c)(8) through (11), and add new paragraph (c)(7);
- c. Revise the paragraph (e) introductory text and paragraphs (e)(1), (2), (3), (5), (7), and (9);
  - d. Republish the paragraph (g) introductory text, revise paragraph (g)(1); and
- e. Republish paragraph (i) introductory text and paragraph (i)(1), and revise paragraphs (i)(2), (i)(3), and (i)(4).

The revisions and addition read as follows:

§ 192.7 What documents are incorporated by reference partly or wholly in this part?

\* \* \* \* \*

(b) American Petroleum Institute (API), 200 Massachusetts Avenue NW, Suite 1100, Washington, D.C. 20001, phone: 202-682-8000, http://api.org/.

\* \* \* \* \*

- (7) API Specification 5L, "Specification for Line Pipe," 46<sup>th</sup> edition, April, 2018, including Errata 1 (May 2018), (API Spec 5L), IBR approved for §§ 192.55(e); 192.112(a), (b), (d), (e); 192.113; and Item I, Appendix B to this part.
- (8) API Specification 6D, "Specification for Pipeline Valves," 24th edition,
  August 2014, including Errata 1 (October 2014), Errata 2 (December 2014), Errata 3
  (February 2015), Errata 4 (June 2015), Errata 5 (July 2015), Errata 6 (September 2015),
  Errata 7 (June 2016), Errata 8 (August 2016), Errata 9 (March 2017), Addendum 1
  (March 2015), and Addendum 2 (June 2016), (API Spec 6D), IBR approved for \$192.145(a).
- (9) API Standard 1104, "Welding of Pipelines and Related Facilities," 21st edition, September 2013, including Errata 1 (April 2014), Errata 2 (June 2014), Errata 3 (July 2014), Errata 4 (2015), Errata 5 (September 2018) and Addendum 1 (July 2014), Addendum 2 (May 2016), (API Std 1104), IBR approved for §§ 192.225(a); 192.227(a); 192.229(c); 192.241(c); and Item II, Appendix B to this part.

\* \* \* \* \*

(c) ASME International (ASME), Three Park Avenue, New York, NY 10016, 800-843-2763 (U.S./Canada), http://www.asme.org/.

\* \* \* \* \*

(2) ASME B16.5-2003, "Pipe Flanges and Flanged Fittings, "October 2004, (ASME B16.5), IBR approved for § 192.147(a).

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- (5) ASME B31.8-2018, "Gas Transmission and Distribution Piping Systems," November 20, 2018, (ASME B31.8), IBR approved for §§ 192.112(b) and 192.619(a).
- (6) ASME B31.8S-2016, "Managing System Integrity of Gas Pipelines, Supplement to ASME B31.8," October 31, 2016, (ASME B31.8S), IBR approved for §§ 192.903 note to *Potential impact radius;* 192.907 introductory text, (b); 192.911 introductory text, (i), (k) through (m); 192.913(a) through (c); 192.917 (a) through (e); 192.921(a); 192.923(b); 192.925(b); 192.927(b), (c); 192.929(b); 192.933(c), (d); 192.935(a), (b); 192.937(c); 192.939(a); and 192.945(a).
- (7) ASME B36.10M-2018, "Welded and Seamless Wrought Steel Pipe," 2018 edition, October 12, 2018, (ASME B36.10M), IBR approved for § 192.279.

\* \* \* \* \*

- (e) ASTM International (ASTM), 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428, phone: (610) 832-9585, Web site: http://www.astm.org/.
- (1) ASTM A53/A53M-20, "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless," July 1, 2020, (ASTM A53/A53M), IBR approved for § 192.113; and Item II, Appendix B to this part.
- (2) ASTM A106/A106M-19A, "Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service," November 1, 2019, (ASTM A106/A106M), IBR approved for § 192.113; and Item I, Appendix B to this part.
- (3) ASTM A333/A333M-18, "Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service and Other Applications with Required Notch

Toughness," November 1, 2018, (ASTM A333/A333M), IBR approved for § 192.113; and Item I, Appendix B to this part.

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(5) ASTM A381/A381M-18, "Standard Specification for Metal-Arc-Welded Carbon or High-Strength Low-Alloy Steel Pipe for Use With High-Pressure Transmission Systems," November 1, 2018, (ASTM A381), IBR approved for § 192.113; and Item I, Appendix B to this part.

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- (7) ASTM A671/A671M-20, "Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures," March 1, 2020, (ASTM A671/A671M), IBR approved for §192.113; and Item I, Appendix B to this part.
- \* \* \* \* \*
- (9) ASTM A691/A691M-19, "Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures," November 1, 2019, (ASTM A691/A691M), IBR approved for §192.113; and Item I, Appendix B to this part.

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- (g) Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS), 127 Park St. NE., Vienna, VA 22180, phone: 703-281-6613, Web site: <a href="http://www.mss-hq.org/">http://www.mss-hq.org/</a>.
- (1) ANSI/MSS SP-44-2019, Standard Practice, "Steel Pipeline Flanges," 2020, (ANSI/MSS SP-44), IBR approved for § 192.147(a).

- (2) [Reserved]
- \* \* \* \* \*
- (i) National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169, phone: 617-984-7275, Web site: <a href="http://www.nfpa.org/">http://www.nfpa.org/</a>.
- (1) NFPA-30 (2012), "Flammable and Combustible Liquids Code," 2012 edition, June 20, 2011, including Errata 30-12-1 (September 27, 2011) and Errata 30-12-2 (November 14, 2011), (NFPA-30), IBR approved for § 192.735(b).
- (2) NFPA-58, "Liquefied Petroleum Gas Code," 2020 edition, October 25, 2019, (NFPA 58), IBR approved for § 192.11(a) through (c).
- (3) NFPA-59 (2018), "Utility LP-Gas Plant Code," 2018 edition, August 17, 2018, (NFPA-59), IBR approved for § 192.11(a) through (c).
- (4) NFPA-70, "National Electrical Code (NEC)," 2017 edition, August 23, 2016, (NFPA 70), IBR approved for §§ 192.163(e); and 192.189(c).

\* \* \* \* \*

7. Revise § 192.11 to read as follows

#### § 192.11 Petroleum gas systems.

- (a) Each plant that supplies petroleum gas by pipeline to a natural gas distribution system must meet the requirements of this part and NFPA 58 or NFPA 59 (incorporated by reference, *see* §192.7) based on the scope and applicability statements in those standards.
- (b) Each pipeline system subject to this part that transports only petroleum gas or petroleum gas/air mixtures must meet the requirements of this part and NFPA 58 or

NFPA 59 (incorporated by reference, *see* § 192.7), based on the scope and applicability statements in those standards.

(c) In the event of a conflict between this part and NFPA 58 or NFPA 59 (incorporated by reference, *see* §192.7), NFPA 58 or NFPA 59 shall prevail if applicable based on the scope and applicability statements in those standards.

#### § 192.112 Underground natural gas storage facilities.

- 8. In § 192.112(e)(3), remove the words "ANSI/API Spec 5L" and add in their place the words "API Spec 5L".
- 9. In  $\S$  192.121, revise paragraphs (c)(2)(iv), (d)(2)(iv), and (e)(4) to read as follows

#### § 192.121 Design of plastic pipe.

- \* \* \* \* \* \*
  - (c) \* \* \*
  - (2) \* \* \*
- (iv) The wall thickness for a given outside diameter is not less than that listed in the following table:

Table 1 to paragraph (c)(2)(iv) - PE Pipe: Minimum Wall Thickness and SDR Values		
Pipe Size (inches)	Minimum wall thickness (inches)	Corresponding DR (values)
½" CTS	0.090	7
½" IPS	0.090	9.3
³⁄₄" CTS	0.090	9.7
³⁄₄" IPS	0.095	11
1" CTS	0.099	11
1" IPS	0.119	11
1 1/4" CTS	0.121	11

1 1/4" IPS	0.151	11
1 ½" IPS	0.173	11
2"	0.216	11
3"	0.259	13.5
4"	0.265	17
6"	0.315	21
8"	0.411	21
10"	0.512	21
12"	0.607	21

\* \* \* \* \*

(d) \* \* \*

(2) \* \* \*

(iv) The minimum wall thickness for a given outside diameter is not less than that listed in the following table:

Table 2 to paragraph (d)(2)(iv) - PA-11 Pipe: Minimum Wall Thickness and SDR Values		
Pipe size (inches)	Minimum wall thickness (inches)	Corresponding DR (values)
½" CTS	0.090	7.0
½" IPS	0.090	9.3
³⁄₄" CTS	0.090	9.7
³⁄₄" IPS	0.095	11
1" CTS	0.099	11
1" IPS	0.119	11
1 ¼" CTS	0.121	11
1 1/4" IPS	0.151	11
1 ½" IPS	0.173	11
2" IPS	0.216	11
3" IPS	0.259	13.5
4" IPS	0.333	13.5

6" IPS	0.491	13.5

\* \* \* \* \* \* (e) \* \* \*

(4) The minimum wall thickness for a given outside diameter is not less than that listed in the following table.

Table 3 to paragraph (e)(4) - PA-12 Pipe: Minimum Wall Thickness and SDR Values		
Pipe size (inches)	Minimum wall thickness (inches)	Corresponding DR (values)
½" CTS	0.090	7
½" IPS	0.090	9.3
³/4" CTS	0.090	9.7
³⁄₄" IPS	0.095	11
1" CTS	0.099	11
1" IPS	0.119	11
1 1/4" CTS	0.121	11
1 1/4" IPS	0.151	11
1 ½" IPS	0.173	11
2" IPS	0.216	11
3" IPS	0.259	13.5
4" IPS	0.333	13.5
6" IPS	0.491	13.5

\* \* \* \* \*

# § 192.145 [AMENDED]

10. In § 192.145(a), remove the words "ANSI/API Spec 6D" and add in their place the words "API Spec 6D".

11. In § 192.147, revise paragraph (a) to read as follows

#### § 192.147 Flanges and flange accessories.

- (a) Each flange or flange accessory (other than cast iron) must meet the minimum requirements of ASME/ANSI B16.5 (incorporated by reference, *see* §192.7), ANSI/MSS SP-44 (incorporation by reference, *see* §192.7), or the equivalent.
- \* \* \* \* \*
  - 12. In § 192.153, revise paragraph (d) to read as follows:

#### § 192.153 Components fabricated by welding.

- \* \* \* \* \*
- (d) Except for flat closures designed in accordance with the ASME BPVC (Section VIII, Division 1 or 2) (incorporated by reference, *see* § 192.7), flat closures and fish tails may not be used on pipe that either operates at 100 p.s.i. (689 kPa) gage or more, or is more than 3 inches (76 millimeters) in nominal diameter.
- \* \* \* \* \*
  - 13. Revise § 192.279 to read as follows:

#### § 192.279 Copper pipe.

Copper pipe may not be threaded except that copper pipe used for joining screw fittings or valves may be threaded if the wall thickness is equivalent to the comparable size of Schedule 40 or heavier wall pipe listed in ASME B36.10M (incorporated by reference, see § 192.7).

14. In § 192.727, revise the second sentence in paragraph (g)(1) to read as follows

#### § 192.727 Abandonment or deactivation of facilities

- \* \* \* \* \*
  - (g) \* \* \*

- (1) \* \* \* To obtain a copy of the NPMS Standards, please refer to the NPMS homepage at https://www.npms.phmsa.dot.gov/. \* \* \*
  - 15. In 192.805, revise paragraph (i) to read as follows:

#### § 192.805 Qualification Program

\* \* \* \* \*

(i) After December 16, 2004, notify the Administrator or a State agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the administrator or State agency has verified that it complies with this section. Notifications to PHMSA may be submitted by electronic mail to *InformationResourcesManager@dot.gov*, or by mail to ATTN: Information Resources Manager DOT/PHMSA/OPS, East Building, 2nd Floor, E22-321, 1200 New Jersey Avenue S.E., Washington, D.C. 20590.

#### PART 195 – TRANSPORTATION OF HAZARDOUS LIQUIDS BY PIPELINE

16. The authority citation for part 195 continues to read as follows:

Authority: 30 U.S.C. 185(w)(3), 49 U.S.C. 5103, 60101 et seq., and 49 CFR 1.97.

17. In § 195.1, revise paragraph (c) to read as follows:

#### § 195.1 Which pipelines are covered by this part?

\* \* \* \* \*

(c) *Breakout tanks*. Breakout tanks subject to this part must comply with requirements that apply specifically to breakout tanks and, to the extent applicable, with requirements that apply to pipeline systems and pipeline facilities. If a conflict exists between a requirement that applies specifically to breakout tanks and a requirement that applies to pipeline systems or pipeline facilities, the requirement that applies specifically

to breakout tanks prevails. Anhydrous ammonia breakout tanks need not comply with §§195.132(b), 195.205(b), 195.264(b) and (e), 195.307, 195.428(c) and (d), and 195.432(b) and (c).

- 18. Amend § 195.3 as follows
- a. Revise the paragraph (b) introductory text, redesignate paragraphs (b)(1) through (20), (22), and (23) according to the following table, and revise newly redesignated paragraphs (b)(4), (11) through (13), (16), (17), (19), paragraph (21), and newly redesignated paragraph (22);

Old paragraph	New paragraph
(b)(1)	(b)(11)
(b)(2) through (11)	(b)(1) through (10)
(b)(12)	(b)(22)
(b)(13) through (20)	(b)(12) through (b)(19)
(b)(22)	(b)(23)
(b)(23)	(b)(20)

- b. Republish the paragraph (c) introductory text and revise paragraphs (c)(3) and(4);
  - c. Revise paragraph (e) and (f); and
  - d. Republish the paragraph (g) introductory text and revise paragraph (g)(4). The additions, revisions, and republications read as follows:

# § 195.3 What documents are incorporated by reference partly or wholly in this part?

\* \* \* \* \*

(b) American Petroleum Institute (API), 200 Massachusetts Avenue NW, Suite 1100, Washington, D.C. 20001 and phone: 202-682-8000, Web site: <a href="http://api.org/">http://api.org/</a>.

\* \* \* \* \*

(4) API Recommended Practice 651, "Cathodic Protection of Aboveground Petroleum Storage Tanks," 4<sup>th</sup> edition, September 2014, (API RP 651), IBR approved for §§195.565 and 195.573(d).

\* \* \* \* \*

- (11) API Recommended Practice 2026, "Safe Access/Egress Involving Floating Roofs of Storage Tanks in Petroleum Service," 3<sup>rd</sup> edition, June 2017, (API Pub 2026), IBR approved for § 195.405(b). (12) API Specification 5L, "Specification for Line Pipe," 46<sup>th</sup> edition, April 2018, including Errata 1 (May 2018), (API Spec 5L), IBR approved for § 195.106(b) and (e)
- (13) API Specification 6D, "Specification for Pipeline Valves," 24th edition, August 2014, including Errata 1 (October 2014), Errata 2 (December 2014), Errata 3 (February 2015), Errata 4 (June 2015), Errata 5 (July 2015), Errata 6 (September 2015), Errata 7 (June 2016), Errata 8 (August 2016), Errata 9 (March 2017), Addendum 1 (March 2015), and Addendum 2 (June 2016), (API Spec 6D), IBR approved for §195.116(d).

\* \* \* \* \*

(16) API Standard 620, "Design and Construction of Large, Welded, Low-Pressure Storage Tanks," 12<sup>th</sup> edition, effective October 2013, including Addendum 1 (November 2014), (API Std 620), IBR approved for §§ 195.132(b); 195.205(b); 195.264(b) and (e); 195.307(b); 195.565; and 195.579(d).

(17) API Standard 650, "Welded Tanks for Oil Storage," 13<sup>th</sup> edition, effective March 1, 2020, , (API Std 650), IBR approved for §§ 195.132(b); 195.205(b); 195.264(b), and (e); 195.307(c) and (d); 195.565; and 195.579(d).

\* \* \* \* \*

(19) API Standard 1104, "Welding of Pipelines and Related Facilities," 21st edition, September 2013, including Errata 1 (April 2014), Errata 2 (June 2014), Errata 3 (July 2014), Errata 4 (November 2015), Errata 5 (September 2018), Addendum 1 (July 2014), and Addendum 2 (May 2016), (API Std 1104), IBR approved for §§195.214(a), 195.222(a) and (b), 195.228(b).

\* \* \* \* \*

- (21) API Standard 2000, "Venting Atmospheric and Low-pressure Storage Tanks," 7th edition, Mach 2014, (API Std 2000), IBR approved for §195.264(e).
- (22) API Standard 2350, "Overfill Prevention for Storage Tanks in Petroleum Facilities," 5<sup>th</sup>, September 1, 2020, (API Std 2350), IBR approved for § 195.428(c).

\* \* \* \* \*

(c) ASME International (ASME), Two Park Avenue, New York, NY 10016, 800-843-2763 (U.S/Canada), Web site: <a href="http://www.asme.org/">http://www.asme.org/</a>.

\* \* \* \* \*

(3) ASME B31.4-2006, "Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids" October 20, 2006, (ASME B31.4), IBR approved for § 195.110(a).

(4) ASME B31.8-2018, "Gas Transmission and Distribution Piping Systems," November 20, 2018, (ASME B31.8), IBR approved for §§195.5(a) and 195.406(a).

\* \* \* \* \*

- (e) ASTM International (ASTM), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 119428, phone: 610-832-9585, Web site: http://www.astm.org/.
- (1) ASTM A53/A53M-20, "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless," July 1, 2020, (ASTM A53/A53M), IBR approved for §195.106(e).
- (2) ASTM A106/A106M-19A, "Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service," November 1, 2019, (ASTM A106/A106M), IBR approved for §195.106(e).
- (3) ASTM A333/A333M-18, "Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service and Other Applications with Required Notch Toughness," November 1, 2018, (ASTM A333/A333M), IBR approved for §195.106(e).
- (4) ASTM A381/A381M-18, "Standard Specification for Metal-Arc-Welded Carbon or High-Strength Low-Alloy Steel Pipe for Use With High-Pressure Transmission Systems," November 1, 2018, (ASTM A381), IBR approved for §195.106(e).
- (5) ASTM A671/A671M-20, "Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures," March 1, 2020, (ASTM A671/A671M), IBR approved for §195.106(e).
- (6) ASTM A672/A672M-09, "Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures," approved October 1, 2009,

- (ASTM A672/A672M), IBR approved for § 195.106(e). (7) ASTM A691/A691M-19, "Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures," November 1, 2019, (ASTM A691/A691M), IBR approved for §195.106(e).
- (f) Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS), 127 Park St. N.E., Vienna, VA 22180, phone: 703-281-6613, Web site: <a href="http://www.mss-hq.org/">http://www.mss-hq.org/</a>.
- (1) MSS SP-75-2019 Standard Practice, "High-Test, Wrought, Butt-Welding Fittings," December 2019, (MSS SP-75), IBR approved for §195.118(a).
  - (2) [Reserved]
- (g) NACE International (NACE), 1440 South Creek Drive, Houston, TX 77084, phone: 281-228-6223 or 800-797-6223, Web site: <a href="http://www.nace.org/Publications/">http://www.nace.org/Publications/</a>.
- \* \* \* \* \*
- (4) NACE SP0204-2015, "Standard Practice, Stress Corrosion Cracking (SSC) Direct Assessment Methodology" March 14, 2015, (NACE SP0204), IBR approved for §195.588(c).

#### § 195.5 [AMENDED]

- 19. In § 195.5(a)(1)(i), remove the words "ASME/ANSI B31.8" and add, in their place, the words "ASME B31.8".
  - 20. In § 195.58, revise paragraph (a) to read as follows,

#### § 195.58 Reporting submission requirements

(a) *General*. Except as provided in paragraphs (b) and (e) of this section, an operator must submit each report required by this part electronically to PHMSA at *https://portal.phmsa.dot.gov* unless an alternative reporting method is authorized in accordance with paragraph (d) of this section.

\* \* \* \* \*

21. In § 195.59, amend paragraph (a) by revising the second sentence to read as follows,

# § 195.59 Abandonment and deactivation of facilities

\* \* \* \* \*

(a) \* \* To obtain a copy of the NPMS Standards, please refer to the NPMS homepage at https://www.npms.phmsa.dot.gov. \* \* \*

## § 195.64 [AMENDED]

22. In § 195.64(b) and (c) remove the words "http://opsweb.phmsa.dot.gov" and add, in their place, the words "https://www.portal.phmsa.dot.gov".

#### § 195.106 [AMENDED]

23. In § 195.106(b)(1)(i) and (e)(1) remove the words "ANSI/API Spec 5L" and add, in their place, the words "API Spec 5L".

#### § 195.110 [AMENDED]

24. In § 195.110 remove the words "ASME/ANSI B31.4" and add, in their place, the words "ASME B31.4".

### § 195.116 [AMENDED]

- 25. In § 195.116(d) remove the words "ANSI/API Spec 6D" and add, in their place, the words "API Spec 6D".
  - 26. In § 195.307, paragraph (c) is revised to read as follows:

# § 195.307 Pressure testing aboveground breakout tanks.

\* \* \* \* \*

(c) For aboveground breakout tanks built to API Standard 650 (incorporated by reference, see § 195.3), that were first placed into service after October 2, 2000, testing must be in accordance with sections 7.3.6 and 7.3.7 of API Standard 650.

\* \* \* \* \*

#### § 195.406 [AMENDED]

27. In § 195.406(a)(1)(i) remove the words "ASME/ANSI B31.8" and add, in their place, the words "ASME B31.8".

#### § 195.428 [AMENDED]

28. In § 195.428(c) remove the words "API RP 2350" and add, in their place, the words "API Std 2350".

#### § 195.565 [AMENDED]

29. Amend § 195.565 to remove the words "ANSI/API RP 651" and add in their place the words "API RP 651"

#### § 195.588 [AMENDED]

30. In § 195.588, amend paragraph (c) to remove the words "NACE SP0204-2008" and add in their place the words "NACE SP0204" in each instance they appear.

Issued in Washington, D.C., on December 22, 2020, under authority delegated in 49 CFR 1.97.

# Alan K. Mayberry,

Associate Administrator for Pipeline Safety.

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